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On Personal Pronouns
in the Nostratic Languages

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SONDERDRUCK AUS

LINGUISTICA ET PHILOLOGICA

Gedenkschrift
für
Björn Collinder
(1894–1983)

Herausgegeben von

OTTO GSCHWANTLER – KÁROLY RÉDEI
HERMANN REICHERT

(Philologica Germanica Bd. 6)



1984

WILHELM BRAUMÜLLER
Universitäts-Verlagsbuchhandlung GmbH.
A-1092 Wien · Servitengasse 5

To my dear
colleague
Allan Bomhard
with the
best wishes

Table A

Sing. 1:	Independent pronoun	Object pronoun (+ object prefix of verbs)	Pronoun in genitive	Postnominal possessive pronoun (+ suffix)	Postnominal appositional pron. (+ subject suffix)	Agentive pronoun (+ affix)	
						Postverbal (post-predicative)	Preverbal
Indo-European	*eǵh(om)/*eǵoh ¹	*mā - *me, 2 *mā - *me-2	*mano ³	*-mi ⁴		*-mi / *-m ⁵ , LIE *-m ⁶ , HEC *-mi ¹²	Pre-IE *m-7 *v-13 *hv-16
Semitic-Hamitic	*an-ī, 8 *an-āku	*ya (< *uya ?) ¹⁰		*vya (> *ya, *i) ¹¹	*-āku ⁹		
Kartvelian	*me(n)/*mi ¹⁴	*m- (prefix) ¹⁵		*m(e) ¹⁸		*-m(V) ¹⁹	
Uralic	*mE (= *mi ?), *minV - *munV (+ genitive) ¹⁷	*minV - *munV (+ genitive) ¹⁷					
Proto-Turkic	*bi ²⁰	*mān - *bān (+ genitive) ²¹		*-m ²²		*-m, *bi, CT *mān ²³	
Mongolian	*bi ²⁴	accus. *nama(-yī), (7) MM minā-yī ²⁶ > *minu	*mānu ²⁵ > *minu	*mānu > *minu ²⁷		*bi ²⁸	
Tungusian	*bi ²⁹	*mān- (+ gen.) ³⁰	*mini ³⁰	*bi ³¹		*bi ³²	
Gilyak	*bi ³³	*m- (preverb) ³³	*m-, *fin ³³				
Chukchee-Kamchadal	*gā-m, *gā-m-iv, *m(a)- (prefix + pronoun) ³⁴ u < *hu ³⁶	*kamch.-mi 'me', (7) SKamch. 'to me' ³⁴ un < *hun ³⁷	*gā-m-m-iv ³⁵ 'to me' ³⁴	u-36	-k ³⁸ *-āg/*-eg ⁴¹	-h ³⁹ *-āg/*-eg ⁴¹	
Elamite	*yān ⁴⁰	*yān- (for all obl. cases) ⁴⁰					
Dravidian	*tū, Anat.*ti ¹ *an-ti ¹ 8	*t(w)ā - *t(w)ē ² *ku, m. *ka, 10 f. *ki - *kūm ¹⁵ *g- (prefix) ¹⁵	*tān- (for all obl. cases) ⁴⁰	*-t(i) ⁴ *ku, m. *ka f. *ki - *kūm ¹¹	*-t(i) ⁹	*-si/*-s ⁵ , (7) *-ei ⁶ HEC *-ti ¹²	Pre-IE *th-7 *v-13 *h-16
Indo-European							
Semitic-Hamitic							
Kartvelian							
Uralic							
Proto-Turkic							
Mongolian							
Tungusian							
Gilyak							
Chukchee-Kamch.							
Elamite							
Dravidian							

On Personal Pronouns in the Nostratic Languages

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In the present study (which is intended to be a fragment of a tentative Nostratic comparative grammar) I am trying to reconstruct the original system of personal pronouns (in this paper Sg.1 and Sg.2 only) which underlies the later systems of personal pronouns and pronominal affixes in Semito-Hamitic (henceforth SH), Indo-European (IE), Kartvelian (K), Uralic (U), the Altaic languages [Turkic (T), Mongolian (M), Tungusian (Tn), and Gilyak (Glk)], Chukchee-Kamchadal (ChK), Elamite (E), and Dravidian (D).

§1. Let us first make a synopsis of the personal pronouns and pronominal affixes of Sg.1 and Sg.2 in the daughter-languages (Table A) (to the left)

The numbers in Table A refer to the following explanatory notes:

[1] IE *eǵh(-om) / *eǵoh (or *eǵeh^w) 'I' > OInd. *ahám*, Avestan *azəm*, OPersian *adam*, Old Lithuanian *eš*, pSl (proto-Slavic) **jazъ*, Greek *ἐγώ*, *ἐγών*, Latin *egō*, Gothic *ik*, Hittite *uk*. According to Szemerényi EVS 199, the original form is *eǵ(h)om, which has been preserved in Indo-Iranian and Germanic, while *eǵō (represented in Greek and Latin) is a secondary variant, which is due to the influence of the verbal inflection (Sing.1) *-ō. According to Burrow Sk 85, Greek *ἐγώ*, Lat. *egō* < IE *eǵoh (an Ablautstufe of *eǵh-). On IE *ǵh (> reflexes of *ǵ in most languages, those of *ǵh in Indo-Iranian) see Burrow Sk ibid. IE *tū 'thou' > Avestan *tū*, Lithuanian *tū*, pSl **tī*, Doric Greek *τύ*, Attic Greek *σύ*, Latin *tū*, Gothic *þu*; the Indo-Iranian form **tuwám* (> OInd. *tvam*, Avestan *tvem*, OPers. *tuva*) goes back to IE *tū with an enlargement *-am due to analogical influence of the reflex *eǵhōm 'I' (> OInd. *ahám*, etc.). The proto-Anatolian form **tī* 'thou' is represented by Hittite *zi-k* (-k due to the influence either of *uk* 'I' or the accusative form *tuk* 'thee', comparable to Gothic *þuk*), Palaic *tī* and Hierogly-

phic Luwian *tí* 'thou'. See Brugmann-Delbrück GVG 2.2:382-3, Brugmann KVG 410, Szemerényi EVS 195-9, YaAA 1:20.

[2] IE **mē* ~ **me* 'me' (accus.) > OInd. *mā*, Greek *με* ~ *ἐμέ*, OIrish and Middle Welsh *-m-* (OIrish *ro-m-icc* 'he cured me', MWelsh *ry-m-goruc* 'he made me'), Old Polish *mie*, possibly Hittite *-mu*, Hier. Luwian *ámu* ~ *-mu* (*ámu* is extended to the nominative case as well), Palaic *-mu*. Side by side with this monomorphemic form, there are forms with case inflection and/or with additional deictic morphemes, such as accusative **mē-m* 'me' (with the accusative marker **-m*) > Vedic *mām* and OSlavonic *mę*, dative **mo-i* 'to me' > OInd. *mē*, Greek *μοι* ~ *ἐμοί*, OSlavonic *mi*, OLatin *mī*. IE **t(w)ē* 'thee' (accus.) is preserved in OInd. *tvā*, Attic Greek *σε*, OIrish *-t-*, MWelsh *-th-*, side by side with pIE (proto-IE) forms with case endings, such as accusative form **t(w)ē-m* 'thee' > OInd. *tvām*, OSlavonic *tę* and Lithuanian *tave* (< **tave*). For further details see Brugmann KVG 410-1 (and the table after p. 412), Brugmann-Delbrück GVG 2.2:382-3, Szemerényi EVS 195-201, Lewis-Pedersen CCCG §336, Klingenberg OPG 209, Meriggi UKIYa 268.

[3] IE **mene* (pronoun of Sing.1, genitive case) > Avestan *mana*, OSlavonic *mene*, OLatvian *mani(s)* and Lith. *manęs* (with the final *-s* by analogy with the nominal inflection), Gothic *meina* (contamination of dat. **mei* and genitive **mene*). See Brugmann KVG 412, Szemerényi EVS 197, Stang^{VC85} 249-251.

[4] The pIE possessive nominal suffixes **-mi* 'my' and **-t(i)* 'thy' ¹ have been preserved in Hittite *-mi-* and *-ti-* (e.g., in the accusative forms *xalugataallan-mi-n* 'legatum meum' and *xalugataallat-ti-n* 'legatum teum') See Friedrich HEB 1:§115.

[5] IE **-mi* (> OInd., Avestan, Lith., Hittite *-mi*, Greek *-μi*, OSlavonic *-mъ*, OLat., Gothic *-m*) and **-si* (> OInd., Avestan, Lith. *-si*, Hittite *-ši*, Greek *-σι*, OLat., Gothic *-s*) are "primary endings", i.e. person-and-number markers of non-past tenses. IE **-m* (> OInd., Avestan, OLat. *-m*, Greek *-v*, Hittite *-n*) and **-s* (> OInd., Avest., OLat., Gothic *-s*, Hittite *-š*) are "secondary endings" (person-and-number-markers of past tenses). The origin of the difference between "primary" and "secondary" endings is not clear. In view of the external comparison of IE **-mi*/**-m* and **-si*/**-s* I am inclined to assume that the vowel **i* is an integral part of the morphemes in question, and the difference is of accentual (prosodic) origin.

[6] By LIE (Late proto-Indo-European) I mean the common ancestor of all IE daughter-languages except Anatolian. The existence of LIE as a valid branch of IE is rather obvious (to mention only such important morphological innovations as the feminine gender and the perfect tense). LIE corresponds to Sturtevant's Indo-European, while pIE is Sturtevant's Indo-Hittite. LIE **-H^w* is a primary ending of Sing.1 of the thematic verbs (those with stem-final **e/o*). The thematic vowel + **-H^w* becomes *-ō* (Greek *φέρω*, Latin *ferō*, Gothic *baíra* 'I am carrying, I carry', OIrish abs. *bíru* and constr. *-bíur* < **bírū* 'I carry', Gatha-Avestan *spasyā* 'specto', Lith. *nešū* 'I carry, am carrying'). The LIE ending **-H^w* is obviously connected with Hittite *-xí* (see [7]), but the details of the development remain obscure. LIE **-ei* (a primary ending of Sing.2) is very tentatively reconstructible from Lithuanian *-i* ~ *-ie-* (*neši* 'fers', reflexive *-ie-si*). Celtic **-ī* (OIrish *bíri* 'fers') and Greek *-εις* (*-s* by analogy with the secondary ending?). See Szemerényi EVS 218-9, Watkins CV 140, Watkins GIV 163-4, 212-4, Stang VGBS 405-7, Sturtevant CGHL.

[7] The hypothesis on the pre-IE personal prefixes **H-* (Sing.1) and **t_H-¹* (Sing.2) is based on internal reconstruction. Let us consider the paradigms of the LIE perfect tense, the Hittite *xí*-conjugation and the IE medium voice: Medium voice:

PIE	LIE	OIndian	Avestan	Greek	Goth.	Hittite
	non-past ²	non-past	non-past	non-past	non-past	non-past
	past	past	past	past		
Sing. 1 <i>*-Ho</i>	<i>*-ai</i> < <i>*-Hoi</i>	<i>-ē</i>	<i>-ē</i>	<i>-μᾶ</i>	<i>-da</i>	<i>-xa(xa)t(i)</i> past
	<i>*-soi</i> ³	<i>-i</i>	<i>-i</i>	<i>-μᾶν</i>		<i>-xa(xa)t(i)</i>
Sing. 2 <i>*-tHv</i>	<i>*-tH^vs</i> , <i>*-so</i> ³	<i>-sē</i>	<i>-sē</i>	<i>-σοι</i> ⁴	<i>-za</i>	<i>-ta(ti)</i>
		<i>-thās</i>	<i>-sa</i>	<i>-σο</i>		<i>-tat(i)</i>
Sing. 3 <i>*-to</i>	<i>*-toi</i>	<i>-tē</i>	<i>-tē</i>	<i>-τοι</i> ⁴	<i>-da</i>	<i>-ta(ri)</i>
	<i>*-to</i>	<i>-ta</i>	<i>-ta</i>	<i>-το</i>		<i>-tat(i)</i>

PIE stative > LIE perfect tense:

	PIE stative	LIE perfect	>	OInd. perfect	Greek perfect	Gothic perf.
Sing. 1	*-He	*-Ha ⁵ , e.g. *woid-Ha 'I know'		vēda	Foṭōa	wait
Sing. 2	*-tHe	*-tHa, e.g. *woid-tHa 'you know'		vēttha	Foṭōa	waist
Sing. 3	*-e	*-e, e.g. *woid-e 'knows'		vēda	Foṭōe	wait

Now we may compare the pIE medium, the pIE stative (+ LIE perfect) and the Hittite *zi*-conjugation:

	PIE medium	PIE stative	Hittite <i>zi</i> -con- jugation (present)
Sing. 1	*-Ho	*-He	-xi
Sing. 2	*-tHV	*-tHe	-ti < *-tHi ⁶
Sing. 3	*-to	*-e	-i

In the paradigms the suffix of person precedes that of tense/aspect and voice. How are we to explain this rather unusual order of suffixes? From typology of languages of the world we learn that suffix-conjugated tenses usually go back to periphrastic (analytic) constructions of three different types:

- Nomen verbale (i.e. verbal noun or verbal adjective) + a suffix-conjugated auxiliary verb. Examples: The future in French, Spanish and Italian (*cantare habeo* > French *chanterai*), the past tense in Polish (pSl **sypal̥ jesm̥* > Polish *spat̥em* 'I slept').
- Nomen verbale + pronouns. Examples: the West Semitic perfect and the Akkadian permansive (WSem. **wašinta* 'dormis' < **wašimV* 'asleep' + **ta* 'thou', Akkadian *šalmāku* 'valeo' < **šalimV* 'valens' + **ʔāku* 'I').
- Nomen verbale + a prefix-conjugated auxiliary verb. An Example: the Awngi (Central Cushitic) definite past tense: Sing. 1 *ḡepúyà* 'I bought' Sg. 2 *ḡewtúyà*, Sg. 3 m. **ḡewúya*, Sg. 3 f. **ḡewtúyà*, Pl. 1 *ḡewnúyà* < Sg. 1 **ḡeb* *ʔ-uya*, Sg. 2 **ḡeb t-uya*, Sg. 3 m. **ḡeb y-uya*, Sg. 3 f. **ḡeb t-uya*, etc. See Hetzron VSSA 12 ff.

The verbal paradigms with the person-maker in the world-final position go back to analytical constructions (a) and (b), while those with the person-marker preceding the

tense-or-voice marker are most likely to go back to a construction of the type (c), i.e. Nomen verbale + a prefix-conjugated auxiliary verb. Hence, the IE medium, the LIE perfect tense and the Hittite *zi*-conjugation point to underlying constructions with prefix-conjugated auxiliaries. Thus we come to the conclusion about the prefix **H-* for Sg. 1 and **t(H)-* for Sg. 2 (while the forms of Sg. 3 have either no prefix or a prefix **t-*, going back to a demonstrative pronoun).

[8] The SH disjunct pronoun ("Nennform") **ʔanī* 'I' has been preseved:

- in Semitic as a self-standing Nennform-pronoun **ʔanī* (> Hebrew *ʔānī*) with a secondary variant **ʔanī* (> Arab. *ʔanā*, Ethiopian *ʔana* etc., probably due to analogy with Sg. 2 m. **ʔanta* 'thou'), as well as an enclitic object pronoun **nī* 'me' (> Hebrew, Arabic, Aramaic, Ethiopian *-nī*, Akkadian *-ni*),
- in Cushitic as a self-standing pronoun: Beḡawye *anī* ~ *āne*, Bilin *ʔan*, Awngi *ān*, Somali *anī-ga*, *anī-gī*, Galla *ānā*, Saho *anū* (-u from the nominal inflection), Sidamo *ane*, pSCush. **ʔānī* (Ehret SCP 283), as well as a subject pronoun: Somali *ān*, Galla *ānī*. See Dolgopolsky SF 210-1.

The SH pronoun **ʔanāku* 'I' has been preserved as a self-standing pronoun in Semitic **ʔanāku* (> Akkad. *anāku*, Hebrew *ʔānōkī*, Phoenician *ʔnk* ~ *ʔnky*, Ugaritic *ʔānVkv*, Yaʔu-dic Aramaic *ʔnk*), in Eg. *īnk* > Coptic ANOK and in pBerber *enakk*^W 'I' (Prasse MGT I-III:179).

The SH independent pronoun **ʔantī* 'thou' is represented in Cush.: Bilin *ʔentī*, Awngi *entē*, Somali *adī-ga*, *adī-gī*, Galla *ātī*, Saho *atū* (-u from the nominal inflection), Sidamo *ate*, pSCush. **ʔāta* (Ehret SCP 282), etc. (see Dolgopolsky SF 133-4). In Semitic there is a gender differentiation between **ʔant-a* 'thou' m. (> Akkad. *atta*, Hebrew *ʔattā*, Arabic *ʔanta*, etc.) and **ʔant-ī* 'thou' f. (> Akkad. *attī*, Hebrew *ʔattē*, Arabic *ʔantī*, etc.), which is either a pSemitic innovation, probably due to the influence of the pronouns **ka* 'thee, thy' (m.) and **ki* 'thee, thy' (f.), or a SH archaism: **ʔanta* m. < **ʔantī*-a (with the masculine particle **-a*, see [10]), preserved in pS **ʔanta* 'thou' m. and in pSCush. **āta* 'thou' (a former masculine form, which has lost its gender meaning)

[9] In SH there is a special series of pronominal affixes

used as subjects following nominal predicates. This construction (+ predicative form of nomina) has been preserved in Akkadian: Sg.1 *gašr-āku* 'I am strong', *gašr-āta* 'you (sg.m.) are strong', *gašr-āti* 'you (sg.f.) are strong'. In other languages this construction (+ predicative form of nomina) has joined the verbal paradigm as a tense. This is the case with the WSemitic stative + perfect, with the OEg. conjugation of the "pseudo-participle" and with the proto-Berber "parfait qualificatif":

- A. WS stative + perfect: Sg.1 stem + *-ku (**mawīt-ku* 'I am dead' + 'I have died' > Eth. *mōtkū*), Sg.2 m.: stem + *-ta (**mawīt-ta* 'mortuus es' > Hebrew *māttā*, Arab. *mitta*), Sg.2 f.: stem + *-ti (**mawīt-ti* 'mortua es' > Hebrew *mātte*, Arab. *mitti*);
- B. OEg. conjugation of the "pseudo-participle": Sg.1: stem + kw ~ kj (ǵrx.kw ~ ǵrx.kj 'I know'), Sg.2: stem + tj (ǵrx.tj 'you know');
- C. Proto-Berber "parfait qualificatif": Sg.1 stem + *-ay (> Kabyle stem + -əy, e.g. *melluləy* 'I am white', Tahaggart stem + -āy), Sg.2: stem + *-ad (> Kabyle stem + -əḍ, e.g. *melluləḍ* 'you are white', Tahaggart stem + -ād or t- + stem + -ād with the facultative t- by analogy with the regular prefix-conjugation of verbs). See Djakonoff SHL 85-7, Edel AAG 269-287, Cohen SVS 22-3, Klingenberg PSK 230-1. Hanoteau EGT 195, Stumme HSchT 55, cp. Prasse MHT VI-VII:10-1, 193.⁷

The SH pronominal affixes in question may be reconstructed as *-āku for Sg.1 (> Akkadian -āku, pWSem. *-ku with loss of *ā by analogy with the forms of other persons, Eg. -kw ~ -kj, proto-Berber *-ay), *-t(i) for Sg.2 (> Eg. -tj, pB *-ad, pS *-ta m. and *-ti f.); the gender distinction in Semitic is either an innovation (due to analogy with *ka 'thee, thy' m. and *ki 'thee, thy' f.) or an archaic feature with *-ta preserving the SH masculine-marker *-a (discussed in [10])

The fact that these pronominal affixes (< pronouns) are found within SH compound pronouns **ʔan-āku* 'I' and **ʔan-t(i)* 'thou' (see above [8]), which are not predicates, suggests that originally *-āku and *-t(i) could accompany a nomen (noun, adjective etc.), no matter ^{what} the syntactic function of the latter, i.e. originally they function as an apposition to a nomen: **ʔan-āku* and **ʔan-t(i)* may have originally meant 'self I' and 'self thou' (cp. Italian *proprio io* and *proprio tu* or French *moi-même*; see below §2.6), and pS **šalim-āku* (> Akkadian *šalmāku* 'valeo, I am all right') may have the

etymological meaning 'valens ego, safe-and-sound I'. Later, when the nomen assumed the function of a predicate, its apposition (personal pronominal affix) became its subject: pS **šalim-āku* 'all right am I'.

[10] SH **ya* (pers.pron.Sg.1 in the oblique cases) have been preserved in Akkadian (*yā-ti* 'me' accus., *ana yā-šim* 'to me'), in pBerb. (suffix *-i/*-y and prefix *-i/*y-, both meaning 'me') and in Cushitic (Saho *yī*, *yō*, *yotte* 'me', Somali *i*, Elmolo *i*- 'me', Dasenech *yē*, Sidamo -ē 'me', Beḍawye -ē- in the compound suffix -h-ē-b 'me'). The Eg. enclitic pronoun wj (used as object of verbs, as well as in some other functions) suggests that this **ya* has resulted from reduction of earlier SH **ʔuya* (cf. below [11]).

SH **ku* 'thee' is found in Akkadian *ku(w)āti* (> *kāti* ~ *kāta*) 'thee' (accus.), (*ana*) *ku(w)āšim* > *kāšim* 'to thee' and in Cushitic **ku* 'thee' > Saho *ku*, *kuo*, Somali *ku*, Elmolo *kī*- (preverb), Dasenech *kō*, Awnji -*ku* (verbal suffix), Iraqw *kō* 'thee' (analytic preverb), etc. Cp. Dolgopolsky SF 77-8, 260.

Side by side with **ku* (object pronoun of Sg.2 without gender distinction) there are special pronouns for masculine and feminine: **ka* 'thee' m., **kī* ~ **kVm* 'thee' f.

SH **k-a* 'thee' m. has been preserved in pS *-*ka* 'thee' m. (verbal suffix), pB *-*ek* 'thee' m. (suffix), in Cushitic **ka* 'thee' m. (> Bilin -*kā* and Beḍawye -*hō-k(a)*, verbal suffixes), in Chadic **ka* 'thee' m. (> Hausa *ka*, Bolanchi *kā*, Mubi *ka*, etc., see Dolgopolsky EPC) and possibly in Eg. kw 'thee' m. (< **kV-w*; *-w is a suffix, cp. Eg. *čw* (< **kī-w*) 'thee' f.). > Cush. **kī* 'thee' f. (> Bilin -*kī*, Beḍawye -*hō-k(i)*, verbal suffixes) and by Ch. **kī* 'thee' f. (> Hausa *kī*, Bolanchi *šī*, Mubi *kī*, etc., see Dolgopolsky EPC).

SH **kVm* 'thee' f. is found in pB *-*kam* 'thee' f. (Prasse MGT I-III:173) and in Ch. **kVm* id. (> Ngizim, Duway *kəm*, Badi *gəm*, Buduma -*gem*).

The feminine-marker *-i in SH **k-i* is identical to pS *-i and Beḍawye -i as suffixes of fem.sg. in verbal forms of the 2nd person (imperative and indicative), e.g. Sg.2 f. imperative: Hebrew *šəp-ī* 'sit!' (f.sg.), Arab. *ʾiḡlis-ī* 'sit!' (f.sg.), Beḍawye *dir-i* 'kill!' (f.sg.). The masculine-marker *-a in the pronoun **k-a* is identical to the marker of masc. sg. in the Beḍawye verbal forms of the 2nd pers.: *dir-a* 'sit!' (m.sg.). Some tentative conclusions on the origin of these gender-markers may be drawn from analysis of their distribution. The fact that in the prefix-conjugated verbal forms of Sg.2 (such as Beḍawye *ti-háy-a* 'thou [m.] art', *ti-háy-i* 'thou [f.] art', Hebrew *ti-šmoC-ī* 'thou [m.] art', *ti-šmoC-i* 'thou [f.] art'), SH **k-i* 'thee' f. is represented by pS **kī* 'thee' f. (verbal suffix), Eg. *čw* (< **kī-w*) 'thee' f.,

'you [f.sg.] will hear') the gender-marker is separated from the person-marker (+ personal pronoun) suggests that the gender-marker cannot go back to personal pronouns or their attributes (appositions). What is important with the gender-markers *-t̃ (f.) and *-a (m) is (1) that they are used in verbs & pers. pronouns in Sg.2 forms only (cp. a Beḍawye paradigm of the past tense of the verb /dir 'to kill': Sg.1 a-dir, Sg.2 m. t̃i-dir-a, Sg. 2 f. t̃i-dir-i, Sg.3 m. i-dir, Sg.3 f. t̃i-dir, Pl.1 ñi-dir, etc.), (2) that they are always used as suffixes only, and (3) that they follow quite different parts of speech: verbs (both imperative and indicative), nouns, adjectives and pronouns. All these peculiarities of distribution are easily accounted for by an assumption that these gender-markers go back to address words. Feminine-markers *-t̃ and *-m may go back to words meaning 'mother': cp. SH roots *p̃ṽy- 'mother' (> ECush. *p̃āyy- 'mother' > Rendille ay-o, Boni āy-ō, Galla āyy-o, Burju āyy-e, etc.; SCush *p̃āyo ~ *yāyo 'mother' > Iraqw ayo, Burunge, Alagwa iyo, Asa yeyo, Dahalo žāžo; Chadic *p̃iya 'mother' > Pero [WCh.] iyā, Mubi [ECh.] iyā, Hwona [CCh.] p̃iya, WMargi [CCh.] p̃iyā 'mother', etc.) and *p̃vm- ~ *m̃v 'mother' (> pS *p̃imm- ~ *p̃umma- 'mother'; Eg. mw.t 'mother'; Berber *m̃mā 'mother' > Ait-Izdeg mma, Tahaggart, Tawelemeden, Ghadames, Tashelhit ma, etc.; Chadic: Ngizim māi, Kera āmā 'mother', Gwandara ama, Pa'anchi ama-ti, Kilba āmā, etc.). Cf. Black LEC 214, Cohen DRS 1:22-3, Ebert STK II:26, 103, Ehret SCP 317, Foucauld DTF 3:1134, Ghoubād Alojaly GTF 122, Jungraithmayr-Shimizu CLR 2:185, Kraft ChW I-III, Mercier VTAI 165, Sasse PEC 44, Schuh DN 109, Skinner NBL 32. The gender-markers in question bear some typological resemblance to English [sɜ:] and [m], which may be regarded as gender-markers within the utterances ['je(s)sɜ:] (Yes, sir) and ['jesm] (Yes, mam).

[11] SH *p̃ṽya (> *-ya/*-ī) 'my' has been preserved as a suffix in Sem. *-ya/*-ī, pB *-ī/*-y 'my' (Prasse MGT I-III: 164), Eg. -j, Cush.: Iraqw -ē, Alagwa -ī, Burunge -ayī, Sidamo -p̃ya, Somali -(k/t)-ay, Galla -(k/t)-īyyā (-k- and -t- are gender-markers of the noun), Elmolo -au, -u, as well as in Chadic: Margi -āyū, Musgu -ā, -ya, Hausa -a (for further details and analysis of the Ch. pronouns cf. Dolgopolsky EPC). The Sidamo morpheme -p̃ya 'my' suggests the reconstruction of a morpheme with an initial laryngeal (*p̃ṽya), cp. Eg. wj 'me, I' (presupposing *p̃uya, see above [10]).

SH *ka 'thy' (masc. possessoris) > Sem. *-ka id. (> Hebrew -kā 'thy' id., Arabic -ka id., etc.), Beḍawye -ka 'thy'm., WCh.: Hausa -ka 'thy'm., Bolanchi -ko id., etc.

SH *ki 'thy' (fem. possessoris) > Sem. *-ki, Eg. -č, Beḍawye -kī, Haraso (ECush.) -čhi, WCh.: Hausa -ki, Bolanchi

-iš, Kulere -iky, She -ič, etc.

SH *kvm 'thy' (fem. possessoris) has been preserved in Berber (pB *-em, see Prasse MGT I-III:64) and in Central Chadic (e.g., Buduma -gum). Cp. *kvm 'thee' f. ([10]).

The gender of the SH possessive pronoun *ku is more problematic. As can be seen from certain Cushitic and Chadic languages preserving gender differentiation in Sg.2 possessive suffixes (e.g. Haraso [ECush.] čhu 'thy' m. versus -čhi 'thy' fem. possessoris, Buduma [CCh.] -gu 'thy' m. versus -gum 'thy' f.), *ku referred to the masculine gender. But the obvious etymological identity of this possessive *ku with the SH object pronoun *ku 'thee' (lacking gender differentiation) suggests that the association of the possessive *ku with the masculine gender is secondary: it seems to have resulted from a semantic polarization, due to the presence of feminine possessives *ki and *kṽm.

Eg. -k 'thy' m. (> Coptic -K) and pB *-ek 'thy' m. may go back both to *ka and to *ku.

[12] SH *-mi and *-ti as verbal suffixes of Sg.1 and Sg.2 have been preserved in Highland East Cushitic, e.g. in Kambatta yom-mi 'sum', yon-ti 'es' (see Dolgopolsky PLOG 103-110, 112, cp. another opinion in Zaborski VC 106-119). Cp. *t̃i in SH *an-t̃i 'tu' and *mi 'I' probably preserved in WCh. (Southern Bauchi: Lungi mi 'I', Zul āmi 'I' [possibly from *an-mi?], see Dolgopolsky EPC).

[13] SH *ṽ- (verbal prefix of Sg.1) > Sem. *ṽ-, Cush. *ṽ- (> Beḍawye, Saho, Afar, Somali, Awngi ṽ-, ṽ-), pB zero-prefix *θ- < *a- in the form *θ-stem-āy, Sg.1 of verbs (Prasse MGT VI-VII:16).

SH *tṽ- (verbal prefix of the 2nd person) > Sem. *tṽ-, Cush. *tṽ- (> Beḍawye, Saho, Afar, Somali, Awngi tṽ-), pB *t- in the form *t-stem-ād, Sg.2 of verbs.

[14] Kartvelian *me(n) 'I, me' > OGeorgian me(n), G me, Megrelian ma, Laz ma(n). K *mi (apophonical variant of *me) > Svanian mi 'I'. See Klimov ĖSKYa 132, Illič-Svitič OS 1:153. The apophony *e (< *ye) / *i is a regular development of a pre-Kartv. *i (see Gamqrelize-Mačavariani SSAKE 175-379, Illič-Svitič GM, Dolgopolsky-Dibo-Zaliznyak VIS 89-90). K *si 'thou' > Megr. si, Laz si(n), Svan. si. A variant *swen is found (according to Illič-Svitič) in the compositum *š(w)en (Sg.2 poss. and genitive) < *č-swen-; *č- is the pK marker of possessive and genitive in pronouns. See Klimov ĖSKYa 162-3, Illič-Svitič OS 1:6.

[15] K *m- 'me, to me' (verbal prefix) > OG, G, Svan. m-,

Megr., Laz *m-* (*~b-* *~p-* *~p-*). K **g-* 'thee, to thee' (verbal prefix) > OG, G, Laz *g-*, Megr. *g-* *~p-*, Svan. *ž-*.

[16] **hw-* (verbal prefix of Sg.1 agentis) > OG *w-* (*~xw-^{p8}*), G *v-*, Megr. *w-* (before vowels), *b-*, *p-* and *p-* (before consonants), Laz *w-*, *b-*, *p-*, *p-*, Svan. *xw-*, *w-*. See Mačavariani SKKS 71-73 (reconstruction of the pK phoneme **h*), Deeters KhV 25-27, cp. Klimov ESKYa 258 (his reconstruction of the Sg.1 prefix is **xw-*, since he does not distinguish between **x* and **h*).

K **h-* (agential prefix of Sg.2) > OG *x-* (in one dialect) and *h-* (in another one), G *θ-* *~* (rare) *x-*, (in dialects) *x-*, *h-*, Megr. *θ-*, Laz *θ-*, Svan. *x-*, *θ-*. See Mačavariani SKKS 71-73, Deeters KhV 28-34, Klimov ESKYa 257.

[17] In Uralic the original forms of the nominative case of the pronouns are **mE⁹* 'I' (> proto-Permian *mē* > Ziryene, Yažva Komi *me*; proto-Ostyak **mä*; proto-Vogul **äm* < *ä-mE*) and **tE⁹* 'thou' (> proto-Permian **tē*, Hungarian *tē*). In the oblique cases stems with a **n-* suffix were used: Sg.1 **min-* *~* **mun-*, Sg.2 **tin-* *~* **tun-* *~* **tün-*. This distinction between stems has been preserved in a few languages only: Ziryene and Yažva-Komi (nom. *me*, oblique cases *men-*, nom. *te*, oblique cases *ten-*), EOstyak (e.g. Vakh nom. *mā*, obl. cases *mān-*), NOstyak (e.g. Obdorsk *mā*, *mān-*), Vogul (e.g. in the Konda dialect nom. *īm*, obl. *īm-*, Tavda nom. *em*, obl. *emān* *~* *enām*). But usually the stems with **n-* were generalized and extended to the nominative case as well: 1) **minV* > Finnish *minä*, Cheremis W *mān* 'I', 2) **munV* 'I' > proto-Lapp **mōn*, Mordvin *mon*, proto-Samoyed **mōn*, 3) **tinV* *~* **tünV* 'thou' > Finnish *sinä*, Cheremis W *tān*, proto-Ostyak **nōn* *~* **nēn* (**t* > **n* by assimilation), proto-Vogul **nān^w* (> Tavda *nāw*, *nūw*, Lower Konda and Upper Konda *nān*, NVogul *nān*, etc.), 4) **tunV* 'thou' > proto-Lapp **tōn*, Mordvin *ton*, proto-Samoyed **tōn*¹⁰.

The variation of vowels in the stems suggests levelling processes, probably an analogical influence of Sg.1 pronoun upon Sg.2 pronoun and/or viceversa. A plausible hypothesis is that the original form of the stems was **mi* for Sg.1 and **tū* for Sg.2. The stems of oblique cases go back to the forms of genitive (**mi-nu* and **tū-nu*, cp. Mong. Sg.1 genitive *minu* and Sg.2 genitive *cinu* < **tinu*), which were later generalized as stems for all oblique cases. The variant **tinV* (with **i* for the original **ū*) is due to analogy with **minV*. The variant **tunV* (from **tūnu* due to vowel harmony) influenced the Sg.1 pronoun, hence the stem **munV*. Another factor responsible for the change **i* > **u* in **munV* is the labializing influence of **m*. Ostyak has preserved (in its **ō* in **nōn* 'thou' > Vakh, Vasyugan *nōn*, Tremyugan *nōn*) the **ū* of

the stem **tūnV*.

The original suffix vowel **u* of the genitive case forms **minu* *~* **munu* and **tinu* *~* **tunu*, comparable to that of Mong. *minu* and *cinu*, can be possibly found in the genitive forms of Finnish (*minu-n*, *sinu-n*), Estonian (*minu*, *sinu*) and Lapp (pL **mōn* < > Kola Lapp *mōne*, *mūne*, *mōn^a* *~* pL **mū* > NLapp *mū*, *mu*, SLapp *muw*, pL **tōn* < > **tū*)¹¹.

See Collinder CG 308-10, Honti GOV 167, Illič-Svitč OS 2:64-5, Itkonen OLV 17-18, Janhunen SW 86, 147, Janhunen UKS 14-5, Liimola WPP 20, MSZFE 3:621-2, Sammallahti EKS 32, 38, Szinnyi FUS 95, Vértés OP 191-215, 235-9, Wiklund EUL 280-4.

The Mordvin suffixes *-m-* 'me', *-t-* 'thee' and the Hung. suffix *-l-* 'thee' in the verbal forms of the so-called "objective conjugation" are not mentioned here as markers of pronominal object, since they cannot be traced back to pU as object pronouns. To my mind, the verbal forms in question may go back to periphrastic constructions of verbal nouns with pronominal possessive suffixes + auxiliary verbs, hence the pronominal morphemes in question go back to possessive pronominal suffixes. See Kövesi OK 96-106, Szinnyi FUS 131-3.

[18] According to P.Hajdú, the pU possessive suffixes are **-me* 'my' and **-te* 'thy' (Hajdú BUNY 69). The reconstruction of the vowel **e* here is open to discussion, hence I write it with half-brackets *ʼ* (half-brackets of questionable reconstruction).

Proto-Uralic **-mʼe* > OFinnish *-mi* (*poikase-mi* 'mein Sohnchen'), Finnish (Iitti dial.), *-m* (< *-mi*), pLapp **-m^a* (> NLapp, Lule, ELapp *-m*, SLapp *-me*, *-me*), Mordvin (Erzä) *-m*, Cheremis *-m* *~* *-em*, pPermian (after Litzkin) **-mV*, Ostyak *-m*, Vogul *-em* *~* *-um*, Hung. *-mV*, pSam. (Künnap) **-mV*. PU **-tʼe* > Finnish *-si* (OFinnish also *-ti*), pLapp **-t^a*, Mordvin, Cheremis *-t*, pPerm. **-tV*, pSam. (after Künnap) **-δV* *~* **-tV*. Cp. J.Mark's¹² reconstruction of 1929: **-mV* (*~* **-wV*) for the 1st person, **-tV* (*~* **-δV*) for the 2nd person. See Collinder CG 299-301, Korhonen JLKH 236-7, 267-70, Künnap SUKFI:156-82, Mark PSUS (the whole paper), Mark SPUS 50-62, Szinnyi FUS 97-103, Teplyašina-Litzkin PYa 149-50.

[19] PU **-mV* (verbal suffix(es) or postverbal subject pronoun(s)¹² of Sg.1) > Finnish *-n*, pLapp **-m* (> Lapp N *-m*), Mordvin *-n*, Cheremis *-m*, Votyak *-m*, Ostyak, Vogul *-m*, Hung. *-m*, pSam. (after Künnap) **-mV*, **-m*. PU **-tV* / **δV* (verbal suffix(es) or postverbal pronoun(s)¹² of Sg.2) > Finnish *-t*, Mordvin, Cheremis *-t*, Hung. *-l* (< **-δV*), pSam. **-tV*, **-t¹³*. The pLapp suffix of Sg.2 **-k* (> *-k*, *-h*, *-θ* in dialects of Lapp) goes back, according to Collinder, to **-k-ti* (**-k-is* a

suffix of present). See Collinder CG 308-9, Hajdú BUNy 140-4, Kerhonen JLKH 267-71, 285-7, Künnap SUKF II:11-84, Szinnyei FUS 128-9.

[20] PTurk **bī* 'I' and **sī* 'thou' have been preserved in Chuvash: *eBe* 'I' and *eZe* 'thou'. The initial element *e-* probably goes back to an interjection, since it does not follow the regular sound laws: there is no pT vowel to become initial *e* in Chuvash (all words with initial *e* are either loanwords or interjections). In CT (= Common Turkic, the ancestor of all Turkic languages other than Bulghar and Chuvash) there was a levelling of stems within the declension paradigm, and the stems of oblique classes **mān* Sg.1 and **sān* Sg.2 were extended to the nominative case as well.

[21] PTurk. **mān-* (~ **bān?*)¹⁴, the stem of oblique cases of the pronoun for Sg.1 > Chuvash *man-* id., CT **mān* (~ **bān?*) 'I' (the generalized stem for all cases) > Old Turkic (8th cent. AD) *mān*, *mān-* or *men*, *men*-¹⁵ (in the inscriptions of Kül Tegin and Bilgē Qayan) ~ *bān*, *bān-* or *ben*, *ben*-¹⁵ (in the inscription of Toñuquq), OTurkic (9-12 cent.) *mān*, *mān-* (*men*, *men-*) ~ *bān*, *bān-* (*ben*, *ben-*), Azerbaijani, Eastern Turki *mān*, *mān-*, Türkmen, Kazakh *men*, *men-*, Kazan Tatar *min*, *min-*, Turkish *ben*, *ben-*.

PTurk. **sān*-¹⁵, stem of oblique cases of the pronoun of Sg.2 > Chuvash *san-* id., CT **sān*, *sān-* > OTurkic *sān*, *sān-* ~ *sen*, *sen-* (generalized stem both for most oblique cases and for the nominative), Azerbaijani, ETurki *sān*, *sān-*, Türkmen, Turkish, Kazakh *sen*, *sen-* etc.

The vowel of these stems was not stable in OTurkic, the dative case having the form *maña* ~ *baña* 'to me', *saña* 'to you' (an obvious case of regressive vowel assimilation under the influence of the case ending *-*qa*). According to the reading of Gabain, Tekin, Tezcan and Malov, the accusative forms in the Toñuquq inscription are to be read *bīnī* 'me' and *sīnī* 'thee'.¹⁶ If this reading is reliable, we may see here still another grade of vowel alternation. The question of priority might even arise: which of the two vowels - *ū* (*e*) or *i* - is primary, and which is due to the influence of some case ending(s)? Cp. A. von Gabain's opinion about the primarity of *i* in the pers. pronouns.

See Clauson ED 346, 831, Gabain ATG 91, Gabain PSK 132, Kononov GYATRP 164-6, Malov PDP 61, Ščerbak OSM(I) 124-7, Tekin GOT 138-9, Tezcan UIS 92.

[22] Proto-Turkic **-m*/*-īm* 'my' > Chuvash *-m*/*-ēm*/*-īm* 'my', OTurkic *-m* (after vowels), *-īm* / *-īm*/*-ūm*/*-um* (after consonants) and similar suffixes in other medieval and modern Turkish languages. The symbol *I* stands here for a high vo-

wel, alternating according to the rules of vowel harmony.

Proto-Turkic **-uγ*/*-ūg*, (after vowels) **-γ*/*-g* 'thy' > Chuvash *-u*/*-ū*, Old Turkic *-uγ*/*-ūg*/*-īγ*/*ig*, (after vowels) *-γ*/*-g*, Azerbaijani (dialects) *-uγ*/*ūγ*/*-γ*, *-uw*, *-w* (*gōz*-*ūγ*-*ūn* gen. 'oculi tui', *baba*-*γ*-*īn* 'avi tui', *at*-*uw*-*ī* 'equum tuum'). Chuvash *-u*/*-ū* may go back only to rounded allomorphs **-uγ*/*-ūg*, hence I am inclined to assume that the Old Turkic ~~unrounded~~ allomorphs *-īγ*/*-ig* are secondary. They are due to labial harmony of vowels, which is a rather recent morphophonemic rule: according to T. Tekin, "in Orkhon Turkic the labial harmony is at its first stage of development" (Tekin GOT 63). Side by side with **-(u)γ* / *-(ū)g*, a nasalized variant **-(u/ū)ṅ* (~ **-(ī/i)ṅ?*) exists. In Old Turkic ~~we~~ find both variants, in most other languages of the CT branch the **-(V)ṅ*-suffix is the only one in use. According to J. Benzing (Benzling T 726-7), the nasalized variant is represented by the Chuvash optional allomorph *-ṅn-*, used in the oblique cases side by side with the regular *-u* (*-ū*): genitive *-ṅn-ṅn* 'of thy ...' side by side with the regular *-u-n*. If it is true, it suggests that Chuvash reflects the pT distribution: the **-(V)ṅ*-suffix was originally used in the oblique cases only, and it may be conjectured that it resulted from nasalization of the suffix **-(u)γ*/*-(ū)g* by the adjacent genitive ending **-n*. See Caferoğlu-Doerfer A 302, Kononov GYATRP 148, Levitskaya IFČYA (on the Chuvash reflexes of pT vowels and on the origin of Chuvash *u* and *ū*), Levitskaya IMČYA 14-15, Ščerbak OSM(I) 73, Širaliev VL 44-5, Tekin GOT 122-4.

[23] Proto-Turkic Sg.1 **-m* (> Chuvash *-m*, Old Turkic *-m*, as well as *-m* in Middle Turkic and New Turkic languages) and Sg.2 **-ṅ* (OTurkic *-ṅ*/*-g*, Turkish, Azerbaijani, Karaim *-n*, Türkmen, Qazaq, Kazan Tatar, Qumıq, Altai Turkic, Tuva, Yakut *-ṅ*, Chuvash *-ṅ*) are used as verbal suffixes with the *-dī*/*-tī*-Perfect (Old Turkic *ala-dī-m* 'I took', *ala-dī-ṅ* 'you took'), as well as with some other verbal forms, such as the Conditional (*ala-sa-m* 'I should take')¹⁷.

The sentence-final pronouns **mān* 'I' and **sān* 'thou' are used in the languages of CT origin with nominal predicates and with several verbal tenses (going back to nominal verbalia). In Old Turkic, some Middle Turkic languages (Karakhanid, Chagatay, Old Osman-Turkish, etc.) and in Tuva these pronouns still remain separate words (e.g. OTurkic *qırγız oylı mān* 'I am descendant of Qırγızes', *bān anča ter mān* 'I say as follows', lit. 'ego sic dicens ego', *öltädi sān* 'you will die', lit. 'moriturus tu', Tuva *azılčın men* 'I am a worker', *azılčın sen* 'you are a worker', *azıldār kızı men* 'I work', lit. 'working man I', *nomčān men* 'I read', *nomčān sen* 'you read', *nomčup tur men* 'I read', *nomčup olur men* 'I

am reading', etc.), while in most New Turkic languages these pronouns have become suffixes agglutinated to the predicate nomen or verb, e.g. Qazaq *muýallım-mın* 'I am a teacher', *bala-sın* 'you are a child', *ala-mın* 'I am taking', *ala-sın* 'you (sg.) are taking', etc. In some New Turkic languages the suffix *-mVn* has been reduced to *-(V)m* (probably under the influence of the verbal personal suffix *-Vm*): Turkish *rum-um* 'I am Greek', *oğlun-um* 'I am your son', *evdey-im* 'I am at home', *gidiyor-um* 'I am going away', Crimea Tatar *oşa-m* 'I am a teacher', *ala-m* 'I am taking', Kazan Tatar *ala-m* 'I am taking' (cp. *ala-sın* 'you are taking'). As should be expected, the sentence-final pronouns **mān*, **sān* and their reflexes are found in the languages of the CT branch only. These pronouns can be traced to CT, but not to pT, since in pT the nominative forms **mān* and **sān* did not exist yet (see [20]). Instead, we should expect pT nominatives **bi* and **si* in this function in pT. Indeed, traces of this usage are found in Chuvash, namely in verbal forms going back to participial and gerundial constructions (participle + pronoun and gerund + pronouns as nominal predicates), such as future *pır-p* 'I shall go', *pele-p* 'I shall say' from participium necessitatis (futuri) with **-yu/*-gü(>-b/-ə)* + pronoun **bi (>-p)*¹⁸. See Benzing T 740, 747, Isxakov-Pal'mbax FTYa 351-4, Kononov GYATP 169-70, Levitskaya IMČYa 64-5, Pritsak HTF 153, Ščerbak OSM(G) 24-40, Tekin GOT 138-9, 187-97.

[24] Proto-Mongolian **bi* 'I' > MM (= Middle Mongolian), WrM (= Written Mongolian), Khalka, Moghol *bi*, Monguor *bu*, Dagur *bi*.

Prāe-Mong. **ti* > pM (= proto-Mong.) **či* 'thou' > MM, Kalkha, Monguor *či*, WrM *ci*, Dagur *ši*.

[25] PM **mīnu* (genitive of the pronoun of Sg.1) > MM *minu* ~ *mini*, WrM *minu*, Dagur *mini*, Monguor *mini*, Khalkha *mini*, Kalmuck *minē* ~ *minē*.

Pre-M **tinu* > pM **činu* (genitive of the pronoun of Sg.2) > WrM *cinu*, MM *činu* ~ *čini*, Dagur *šini*, Monguor *čini*, Khalkha *čini*, Kalmuck *čine*.

[26] Proto-Mong. accusative **nama-yi* 'me' (> MM *namai* ~ *namayi*, WrM *namayi*, Dagur *namai*, Moghol *namai*, Buryat *namā(yi)*, etc.) is formed with the regular nominal accusative ending **-yi* from **nama-*, which is a Mongolian stem for oblique cases of 'I' (ablative pM **nama-ča*, instrumentalis **nama-βar*, etc., see Poppe IMCS 212). In MM ("Muqaddimat-al-'Adab", 14th cent.) a form *mina-yi* 'me' (accus.) is attested.

PM **čima-yi* 'thee' (> MM *čima(y)i*, WrM *ci mayi*, Dagur

šamai, Monguor *čimi*, Buryat *šamā(yi)*, etc.) is formed with the nominal accusative-marker **-yi* from **čima-*, which is a pM stem for oblique cases (cp. ablative **čima-ča*, instrumentalis **čima-βar*).

In view of external comparison, we suggest that **čima-* as a stem for oblique cases is a generalization of an accusative form *čima* < **tīma* < **ti* + *ma* (**ti* 'thou' + accusative marker **ma*). In the oblique stem **nama-* we may see a generalization of an accusative form **na-ma*. The origin of **na-* is not clear. According to Ramstedt ÜMP 7 and Poppe IMCS 21, **nama* is from **nima* < **mima*, i.e. the original pronominal stem was **mi-*. Another possible hypothesis is that **na-* goes back to the pronoun **nV* 'we' (1 pl. excl.), comparable to Gilyak *ne-n* ~ *ni-n* 'we' excl. (*n* ~ *-n* is a plural marker), Kartvelian **n-* 'we' excl., SH **n-* (1 pl. excl.), IE **n-* (1 pl.), as well as possibly to Dravidian **nām* 'we' incl. (**-m* is pl. marker).

MM *minayi* 'me' (acc.) is formed with *-yi* (accusative ending) from the stem *min-* (going back to the pM genitive form **mīnu*, see [25]).

[27] In Old Mongolian (unattested language underlying the tradition of WrM) and in MM there is a construction Noun + Genitive of Personal Pronouns: **aqa minu* 'my elder brother', lit. 'frater mei', **aqa činu* 'thy elder brother'. In most modern Mongolian languages such postnominal pronouns "lost their stress, became enclitics, and ultimately became endings" (Poppe IMCS 221): Dagur *-miñ* ~ *-māi* 'my', *-šin* ~ *-šni* 'thy', Moghol *-mini* ~ *-min* ~ *-mni* ~ *-mi* 'my', *-čini* ~ *-či* 'thy', Khalkha *mēn* 'my', *-čēn* 'thy', Kalmuck *-mē* ~ *-m* 'my', *-čēn* 'thy'.

[28] The pM pronouns (nominative case) **mi* 'I' and **či* 'thou' can be used in sentence-final (post-predicative) position as subjects of verbal and nominal predicates: MM ("Secret History of the Mongols") *oyisulaqda'a bi* 'ich bin umgebraucht worden', *okteküi mortei či* 'you (sg.) must obtain'. In some modern Mongolian languages these pronouns have become personal endings of predicates: Kalmuck Sg.1 *-w*, Sg.2 *-č(ə)* (*bi yowna-w* 'I am going', *bi kommunistw* 'I am communist', *bi end-w* 'I am here', *či yowna-č* 'you are going', *či kommunist-č* 'you are a communist', *či gert-č* 'you are at home'), Buryat Sg.1 *-b*, Sg.2 *-š*, Moghol Sg.1 *-bi*, Sg.2 *-či*, Dagur Sg.1 *-bi*, Sg.2 *-ši*. See Poppe BS 113-4, Poppe MM 101, Posch K 223-4, Sanžeev GKYa 83-4, 99-100, Sanžeev SGMYa(G) 82-93, Weiers SM 124, cp. Poppe IMCS 250-1.

[29] Proto-Tungusian **bi* 'I' > Ewenki, Negidal, Solon, Orochi, Ude, Ulcha, Manchu *bi*, Lamut *bi* ~ *bī*, Gold *mi* (*m-*

nov) or $*-ay \sim *-i$ (as reconstructed by Subrahmanyam) > Old Tamil $-Vy \sim -i$, Old Kannada $-ay$, Gondi $-i$, Pengo $-ay$, Kui $-i$, Kurux $-ay$, Malto $-e$. In Parji and Gadaba (Central Dravidian) there is another suffix of Sg.2: Parji $-v\dot{t}$ (used both in "pronominalized nouns" and in verbs), Gadaba $-v\dot{t}$ (only in verbs). The suffix $-v\dot{t} \sim -v\dot{t}$ (having no clear pD etymology) bears a striking resemblance (both in its phonetic shape and in its very peculiar syntactic use) to Elamite $-t$ (see [38]).

In Brahui the verbal ending of Sg.2 subjecti is $-s(a)$. J. Bloch's hypothesis about the borrowing of this ending from Indo-Aryan (Bloch GSDL 53) cannot be accepted for typological reasons: borrowing of personal endings of verbs is practically unknown in the languages of the world. Neither can I accept Andronov's etymology (Brahui $-s < *-yi$, see Andronov SGDYa 352), since it is not supported by known laws of Dravidian historical phonology. I am much more disposed to accept an alternative hypothesis formulated by Andronov: "... The possibility is not excluded that at least some of these endings [Brahui verbal endings $-r$ of Sg.1, $-s$ of Sg.2 and $-k$ of Sg.3] are traces of an ancient system of personal endings of the Dravidian verb, which preceded the development of the modern system" (Andronov YaB 107).

See Andronov SGDYy 283-4, 346-9, 351-3, 362-4, Subrahmanyam DVM 397-400, 405-6, 409-10, Zvelebil CDM 1:47-52, Zvelebil CDP 71-2 (on the development of pD $*-ay$).

§2. The forms of the daughter-languages enumerated in §1 (and summarized in Table A) may be explained as going back to a number of proto-Nostratic (pN) pronouns and non-pronominal words:

1. $*mi$ 'I', 'me', 'my' > IE $*-mi/ *-m$ (verbal suffixes) 'I', $*m\bar{e} \sim *me$ 'me', $*-mi$ (nominal suffix) 'my' / K $*mi$, $*me(n)$ 'I', $*m-$ (verbal prefix) 'me, to me' / U $m\bar{e}$ 'I', $*-m(V)$ (verbal suffix) 'I', $*-m(e)$ (nominal suffix) 'my' / pT $*bi$ (or $*-bi$) 'I', $*-m$ (verbal suffix) 'I', $*-m$ (nominal suffix) 'my' /

/ M $*bi$ 'I' (as an independent pronoun and as a postverbal subject pronoun) / Tn $*bi$ 'I' (as an independent pronoun and as a postverbal subject pronoun), postnominal $*bi$ 'my' / ChK $*ge-m$, $*gemHV$ 'I' (with $*ge-$ being a marker of independent pronouns, and the tentatively reconstructed $*-HV$ being a suffix of the absolute case), $*m(e)-$, verbal prefix^{of} Sg.1 (agent) of the cohortative mood, WKamch. $-m\dot{m}$ 'me' / Etruscan mi 'I', 'me' (see Pallotino E 359, Pfiffig ES 103-4) / probably SH $*m\dot{i}$ 'I' (verbal suffix of Sg.1 in Highland East Cuchitic and independent pronoun in the Southern Bauchi subgroup of Chadic,

as well as the first component of $*m-un$ 'we' in proto-Chadic, $*-un$ being a plural-marker, see Dolgopolsky EPC).

We can see that $*mi$ is used as an independent pronoun 'I', as a subject pronoun of Sg.1 (in a postpredicative position), as an object pronoun of Sg.1 (originally in preverbal position) and as a possessive of Sg.1 (in postnominal position).

It is used with case postpositions as well: pN $*mi nu$ (with the genitive-marker $*nu$) > pM $*m\dot{nu}$ 'mei, meus' (genitive of the pronoun 'I') / pTn $*mini id.$ / IE $*mene$ (genitive of 'I') / ChK $*ge-mn-Vn$ (genitive of 'I'). This genitive form was used as a stem for other oblique cases of the paradigm of 'I': U $*min- \sim *mun-$ / pT $*m\dot{an}- \sim *man- \sim (?) *min-$ (with the vowel influenced by that of the case ending) / pTn $*min-$ / Etruscan $mini$ 'me'. In CT the extended stem $*m\dot{an}-$ was generalized for the whole declension paradigm (including nominative), whence CT $*m\dot{an}$ 'I'. The same process occurred in the Finno-Permian and the Samoyed branches of Uralic (Finno-Permian $*minV \sim *mun(V)$ 'I', Samoyed $*m\dot{an}$ 'I'). In T, M and Tn the initial $*m$ changed into $*b$, which is probably a regular phonetic change (nasal harmony of consonants): the initial $*m$ changes to $*b$ in monosyllabic words with a final vowel (see Illič-Svitič OS 2:65), while in the presence of another nasal consonant the initial $*m$ is preserved, whence pT $*m\dot{an}-$ (oblique stem of the pronoun 'I'), pM $m\dot{nu}$ 'my', pTn $*mini$ 'my', $*min-$ (oblique stem of the pronoun $*bi$ 'I'). For further details see Illič-Svitič OS 2:63-6.

2. $*HoyV$ 'by me' (agent), (?) 'my' > SH $*PuyV$ > Eg. wj, enclitic pronoun of Sg.1 ('me' etc.) and $*ya$, $*-ya$, $*yatV$ 'me' in Sem., Berber, Cush., Chadic, SH $*y\dot{y}a$ 'my' (> Highland ECush. $*-Pya$, Lowland ECush. $*-ya$, Sem. postnominal $*ya$ > $*-ya/*-i$ 'my', Berber $*-y/*-i$, Eg. $-j$ 'my'), SH $*V-$, verbal prefix of Sg.1 subject (> Sem., Cush. $*V-$, pB $*\theta-$), the second element in SH $*Pan-i$ 'I' / pre-IE $*H-$, agentive verbal prefix of Sg.1 (> $*-H-$, verbal presuffix of Sg.1 in the paradigms of the medium (middle voice), in those of the LIE perfect and of the Hittite zi -conjugation, see §1[7]), as well as LIE $*-H^w$, verbal suffix of Sg.1 / K $*hw-$, agentive verbal prefix of Sg.1 / Elamite $*hu$ > u 'I', 'my', $-h$ (verbal subject marker of Sg.1) / pD $*y\dot{a}n$ 'I', obl. cases stem $*yan-$. The vowel of the first syllable of the pN pronoun must have been labial (hence Eg. wj, Kartvelian $*hw-$, Elamite $*hu$ > u , LIE $*-H^w$); it is to be reconstructed as $*o$, since pN $*u$ or $*\dot{u}$ would have yielded pIE $*w$ -diphthongs or $*u$ (see Dolgopolsky NVIE). The initial consonant of the pronoun must have been laryngeal (denoted here as $*H$). The pronoun $*HoyV$ is restricted to the following syntactic usages:

Volodin IYa 223-237), as well as seemingly in B.Dybowski's records of SKamch. (ma 'to me', ci 'thee, to thee') and EKamch. (rye 'thou'). But since Dybowski was not a professional linguist and had no practical knowledge of Kamchadal (according to Volodin IYa 13), his records (unless confirmed by other sources) are to be approached with extreme caution. WKamch. -mīn 'me' (and Dybowski's SKamch. ma 'to me') may be compared to pChK *m(ə)-, prefix of Sg.1 (subject) of the cohortative mood: Chukchee mə-čeyv-ək 'let me go!', Chawchuwen mə-le-k 'let me go!', Alyutor mə-witat-ək 'let me work!', Kerek mə-čihya-k 'let me sleep!', WKamch. m-nukičen 'let me eat!'. See Bogoraz Ch 738-740, Skorik ČYa 262-4, Skorik KYa 323, 327-9, Volodin IYa 220, 232-4, Žukova AYa 302-4, Žukova GKYa 240-6, Radliński SNLK II, III.

[35] The possessive pronouns (← the genitive case of the personal pronouns) of Sg.1 and Sg.2 are pChK *gə-mn-Vn 'my' [> Chukchee, Chawchuwen, Alyutor yəmmin, Kerek umni, WKamch. (Napana) kemnan, (Sedankino) kənan] and pChK *gə-n-Vn (from *gə-ən-Vn?) 'thy' [> Chukchee, Chawchuwen yənin, Alyutor yəninna, Kerek kəninna-, WKamch. (Napana) knin, (Sedankino) knən (see Moll SD 210), EKamch. (Dybowski) книн, SKamch. knin (Krašeninnikov: книн)]. It is interesting to note that other oblique cases of the personal pronouns are often formed by adding case endings to the stem of the genitive *gəmn- (Sg.1) or *gən- (Sg.2): Chukchee instrumental-ergative yəmn-an 'by me', yən-an 'by thee', locative yən-, ək 'in thee', dative yən-əke 'to thee', WKamch. (Napana) locative kn-ink 'in thee', dative-directive kn-anke 'to thee', etc.

[36] In the Elamite texts (from the Middle Elamite (=ME) and Late Elamite (=LE) periods) the independent pronouns of Sg.1 and Sg.2 are u 'I' and nu 'thou'. According to I.Djakonoff, u 'I' < *hu. The reconstruction *hu is based on comparison with the verbal subject suffix ME -h 'I' (> LE -Ø), as well as on the existence of a regular phonetic change h > Ø in the history of Elamite. In the postnominal position the pronoun assumes the function of a possessive ('my'): takki-me u-me 'my life', att-u-re 'my father', petur-u-ri 'my enemy' (-me, -re and -ri are class markers of the corresponding nomina possessa). See Reiner EL 89-90, 102-3, Djakonoff YaDPA 105, Paper RAE 93-7.

[37] On the forms un (< *hun) 'me' and nu 'thee' see Reiner EL 89, Djakonoff YaDPA 106.

[38] The postnominal suffixes -k 'I' and -t 'thou' have the meaning of an apposition (→ subject of a subordinate predi-

cate): sunki-k 'I the king', huttan-k 'faciens ego' + 'me faciente', huttan-t 'te faciente', halpin-t 'when thou art dead' ('mortuus tu' + 'te mortuo'). If the nomen (noun, adjective, participle, etc.) functions as predicate, its pronominal suffix becomes its subject: u ... sunki-k 'I am king', hutta-k 'I made' (literally 'сделавший я'), hutta-t 'you (sg.) made'. See Reiner EL 77, 84-5, 94-5, 99-105, Djakonoff YaDPA 100-5.

[39] ME -h, LE (Royal Achaemenid Elamite) -Ø 'I' and ME, LE -t(i) 'thou' are used as subject-markers of verbs and participles. See Reiner EL 75-6, 94, 98-9, 104-5, Djakonoff YaDPA 100-5, Paper RAE 41-4. According to Djakonoff YaDPA 100, ME -h is from *hu.

[40] PD (= proto-Dravidian) *yān 'I' (stem of the oblique cases xyan-) > Old Tamil yān / en-, Malayam nān (~ nān) / en-, Old Kannada ān / en-, Tulu yānu ~ yēnu / en-, Telugu ānu, Kolami, Parji ān / an-, Kurux, Malto ān / eṅg-. PD *nī'n (abs. case) / *nin- (oblique cases) 'thou' > OTamil nī / nin-, Malayam nī / nin-, OKannada nīn / nin-, Kolami nīv / in-, Parji in / in-, Kurux, Malto nīn / niṅg-. The alternation of long and short vowels results from morphophonemic rules in pD. See Zvelebil CDM 1:40-4, Zvelebil CDPH 35-6, 128, Andronov DL 68-74, Burrow-Emeneau DED 247 (no. 3051), 353 (no. 4234), Shanmugam DN 176-80, 186-8, Andronov SGDYa 250-60.

[41] In Dravidian there are grammatical forms called "pronominalized nouns" or "personal nouns", i.e. nomina (nouns, adjectives, etc.) with suffixed pronominal appositions: Tamil nall-ēn 'bonus ego', nall-āy 'bonus tu', nall-ēm 'boni nos', Classical Kannada ollio-ēn 'bonus ego', ollio-ay 'bonus tu', Malto max-en 'child I', max-e 'child thou', max-em 'children we (excl.)' (cp. a similar construction in E). If in Early Dravidian a nomen was used as predicate, its pronominal suffix was reinterpreted as its subject, and if in addition the nomen was a verbal noun or verbal adjective (→ participle, gerund), the whole construction became a finite verbal form: Malto baṣ-in 'I am beating' (← caedens ego), baṣ-im 'we are beating' (← 'caedentes nos'). Therefore verbs have personal endings, which are etymologically identical to the pronominal suffixes of the "pronominalized nouns".

The suffix of Sg.1 is *-ēn/*-en > Old Tamil -ēn, Old Kannada -en, Parji -en, Gondi -ēnā, Konda -a, Pengo -a, Kui -enu, Kurux -an, Malto -en. I am almost sure about its etymological identity with *yān 'I' (see [40]).

The suffix of Sg.2 is *-ī (as reconstructed by Andro-

preserved in pM *tīma-yī (> cimayī) 'me' and in the stem *tīma-, generalized as a common stem for most oblique cases of the M pronoun of Sg.2. In the combination *t'ū\ nu the initial *t' was nasalized to *n by assimilation with the following *n in the prehistory of Elamo-Dravidian (D nom. *nī'n), oblique cases *nīn; E nun 'thee', whence nom. nu), in the Ob-Ugrian languages [EOstyak (Vakh) nōŋ 'thou', NVogul naŋ, SVogul nūw, nūw < proto-Ob-Ugrian *nōŋ ~ *nōŋ < U *tūn-] and possibly in ChK (genitive *ge-n-vn 'thy' with *-n- < *-nn- < *sn- < *tū nu).

The reconstruction of the initial *t in this pN^{pronoun} is based on sound laws established by V. Illič-Svitič: pN *t- > IE *t-, M *t-, U *t-, SH *t- and *t- (*t- being^{the} regular SH reflex in grammatical and pronominal morphemes; see Illič-Svitič SS 315-9, Illič-Svitič OS 1:147). The vowel of the pN pronoun is represented in the daughter-languages as *i, *u, *ū and their reflexes. It may be suggested that the underlying pN vowel was *ū, which was later delabialized (mainly to *i) in several daughter-languages as a result of a qualitative reduction (i.e. ^{loss} of a phonemic feature typical of grammatical morphemes) and probably by analogy with *mi 'I'. In some daughter-languages (IE, E, several branches of U) *ū was depalatalized to *u. In IE such depalatalization is regular (see Illič-Svitič OS 1:152-3, 191-2, 207-8, 222-3, 236-7, 257, cp. Dolgopolsky NVIE), while in U it may be due to vowel harmony (see above §1 [17]). A rounded palatal vowel has been preserved in Ostyak (proto-Ostyak *nōŋ 'thou', cf. Honti GOV 167) and in pTn *sūū 'you' pl. (< *t'ū\ + *Ha, marker of collectiveness) > Manchu suwe, Gold ^{suz, ōka} sūz, Solon sū etc. (see Benzing TS 107-111, SSTMYa 2:115). Cf. Collinder FUV 74, 155, Collinder IUS 54-5, Collinder UA 15, Dolgopolsky LRC 15, Illič-Svitič OS 1:6, Illič-Svitič SS 317.

The syntactic value of pN *t'ū\ may be reconstructed as follows:

- a) It fulfilled the function of a syntactically unmarked pronoun ("Nennform") of Sg.2 (see the first column of Table A); hence its use as a subject pronoun (including postpredicative sentence-final subject) and as a pronoun with case markers (genitive *t'ū\ nu, accusative *t'ū\ ma).
- b) It was used as a postnominal apposition (hence SH *-t'ū\ in *ʔan-t'ū\ 'thou', SH postnominal subject suffix *-t'ū\, E postnominal appositional -t and possibly pD postnominal appositional suffix of Sg.2, preserved in Parji -t and Gadaba -t).

- c) SH *t- (subject prefix of verbs) and Pre-IE *tH- > IE *-tH- (subject affix of Sg.2 in the LIE perfect and in the Hittite zī-conjugation) suggest that pN *t'ū\ was used as a non-nominative agentive marker of Sg.2. But the laryngeal *h in the IE morpheme appears to point to the presence of some laryngeal element in pN, probably a case marker (of the ergative case?) *HV. If so, one may suggest an underlying *t'ū\ HV 'by thee' (in preverbal position) > IE *-tH-, SH *t- (with loss of the laryngeal) and K *h- (with loss of *t in the consonant cluster **tH). For an alternative explanation of K *h- see §2.5.

As to other syntactic functions of the reflexes of *t'ū\ without case-markers (object in IE and Glk, postnominal possessive 'thy' in IE, U and Tn), they do not necessarily go back to pN usage. They may well be a later (dialectal) development, namely extension of a syntactically unmarked form to new syntactic functions (which up to then had been fulfilled by a special pronoun *KV 'thee, thy', see below §2.4 and §4.1).

4. *KV (= *kv or *gv) 'thee, thy' > K *g- 'thee' (verbal prefix) / SH *ku 'thee', *k-a 'thee' (m.), *k-i and *k-vm^{'thee'} (f.), in a postnominal position *ku 'thy', *k-a 'thy' (masc. possessoris), *k-i and *k-vm^{'thy'} (fem. possessoris) / pT *-g/*-v 'thy' (*-g in words with front vowels, *-v in those with back vowels), with a CT variant *-ŋ 'thy'.

Originally this pronoun functioned as a verbal object (as preserved in K and SH) and as a postnominal possessive (as in SH and T).

5. ?? *Hī, a pronoun of Sg.2 with an uncertain syntactic value > LIE *-ei (?), verbal ending of Sg.2 (> Lith. -ie-, Old Lithuanian -ai-, Celtic *-ī, Greek -ei-, see above §1.6) / K *h-, verbal prefix of Sg.2 (agens) / pD *-ī ~ *-i, suffix Sg.2 (postnominal appositional suffix + verbal subject). This is an alternative explanation of K *h- (for the first explanation see above s.v. *t'ū\). The hypothesis of the existence of a pronoun *Hī is highly tentative (both because we cannot be sure of the existence of an IE ending *-ei and because K *h- may have another explanation). IE *-ei presupposes pN *i (see Illič-Svitič OS 1:153, Dolgopolsky NVIE).

6. *HVke (= *ʔvke ?) > IE *eġ-H(om)/*eġo-H 'I' (independent or emphatic pronoun) / SH *-āku 'I' (postnominal subject), *ʔan-āku 'I' (independent or emphatic pronoun) / E -k

1) Agent marker of Sg.1 of the verb (whence the prefixes K **hw-*, SH **ʔ-*, Pre-IE **H-*). I am inclined to interpret **HoyV* (unlike **mi* 'I') as a non-nominative (ergative ?) agents of the verb. This is suggested by the following observations:

- a. K **hw-* (in the past tenses of the transitive verbs) refers to an agents treated as ergative.
- b. IE **-H-* is used as a subject-marker of the perfect, which is a tense presumably going back to an impersonal construction (with a real agents in an oblique case): **woid-H-e* (> **woida*) 'I know' ← 'it is seen by me, видно мне' (from **weid-* 'to see')²³, whence Greek *φοῖδα*, Old Indian *vēda* and Gothic *wait* 'I know'. On the prehistory of the IE perfect (← impersonal predicate of state/result) see Kurylowicz Ap. 41-8, Kurylowicz IC 61-2 and Watkins GIV 105-6.
- c. In most Nostratic languages (and hence presumably in pN) the person-markers of the verbal subject (originally pronoun as subject) follow the predicate (IE **-mi* 'I', **-si* 'thou', U **-m(V)* 'I', **-t(V)* 'thou', pT subject-markers, etc.) But SH **ʔ-*, K **hw-* (and presumably Pre-IE **H-*) apparently infringe upon this rule: they are prefixes rather than suffixes. In other words, they occupy the position preserved for the objects (see below §3). However, if we assume that the SH, K and Pre-IE prefixes in question go back to markers of a non-nominative agents (i.e. to a kind of indirect object), the morpheme order (← word order) will be explained.
- d. Unlike **mi*, **HoyV* is never used as a subject-marker of a nominal predicate (as far as we can judge on the evidence of its reflexes in the daughter-languages). This fact is easily explained if **HoyV* is interpreted as a non-nominative agents (ergative or the like), since ergative and similar constructions are known to exist only with predicates of action or state (predicates of verbal meaning) and not with predicates of quality (nominal predicates).

2) Postnominal possessive pronoun ('my'), as preserved in Semito-Hamitic and Elamite. In several branches of SH (Egyptian, East and South Cushitic, the Bade-Ngizim subgroup of Chadic) the reflexes of **HoyV* are used as object pronouns (Eg. *wj*, Afar *yō*, Sidamo *-ē*, Somali *i*, Alagwa *i*, Bade *iyū*, Ngizim *iyū* 'me'), but several facts and considerations prevent us from concluding that this SH usage goes back to pN: (a) this usage has no parallels outside SH (Elamite *u-n* and Drav. **ya-n-* are not valid parallels, since they have a case-ending), (b) in no SH language has this

object pronoun joined the verb as a verbal prefix (unlike the agential **HoyV*), which fact suggests a comparatively recent introduction of this syntactic usage of **HoyV*, (c) in Egyptian, Bade-Ngizim and in Highland East Cushitic the object pronoun in question does not precede the verb, as should have been expected if this syntactic usage had been a direct continuation of that pN (see §3). Of course, the reflexes of **HoyV* + case-ending used in SH as objects (Akkadian *yā-ti*, Xamir, Quara and Kemant [Central Cushitic] *ye-t* 'me', Saho *yo-tte* 'me'), as well as Elamite *u-n* and D **ya-n* or **ya-n-* + accusative-ending, give no indication of the ancient functions of **HoyV*, since here the syntactic function is inherent in the case-ending rather than in the pronoun.

3. **ʔi* 'thou' > IE **tū* and Anatolian **ti* 'thou', IE **tē* ~ **twē* 'thee', **-tH-* (subject suffix of Sg.2 in the LIE perfect and the Hittite *xi*-conjugation, going back presumably to a pre-IE verbal prefix **tH-*, see §1 [7]) / SH **-ti* in **ʔan-ti* 'thou', **-ti* as subject suffix for Sg.2 of nominal predicates (← nominal appositional suffix of Sg.2), verbal suffix **-ti*, verbal prefix **tV-* (Sg.2 subjecti) / U **tE* (= **tū* ?) 'thou', **-tE* 'thy' (nominal suffix), **-t(V)* 'thou' (postverbal subject-marker) / pM **ti* (> **či*) 'thou' (independent pronoun), postverbal **ti* 'thou' (subject of the verb) / Gilyak *ih* 'thou', *ih-* 'thee' (preverbal) / ChK **ge-δ*, **ge-δ-H* 'thou' (**ge-* being a marker of independent pronouns) and (???) Dybowski's EKamch. *tyə* 'thou' (as far as we can rely upon Dybowski's records) / Elamite *-t*, postnominal appositional marker of Sg.2 / (??) Dravidian: Parji *-t*, appositional marker of Sg.2 in "pronominized nouns" and verbal suffix of Sg.2, Gadaba *-t*, verbal suffix of Sg.2 subjecti. In several daughter-languages the initial consonant **t-* has been assibilized to **s-*²⁴ under the palatalizing influence of the next vowel: IE **-si*/**-s* (verbal suffix of Sg.2 subjecti) / K **si* 'thou' / pT **si* (or **V-si*) 'thou' / Tn **si* 'thou' / (??) D: Brahui *-s(a)*, verbal suffix of Sg.2, which has no plausible pD etymology.²⁵ The construction **ʔi nu* (**ʔi* with the genitive-marker **nu*) has been preserved in pM **ti nu* (> WRM *cinu*, genitive-possessive form of *ci* 'thou'), Glk *ihən*, U **tin-* ~ **tun-* ~ **tün-* (generalized as a common stem for all oblique cases and in most branches of U as a stem for the whole declension paradigm), pT **sän-* (stem of the oblique cases) > CT **sän* (generalized stem for all cases), pTn genitive **sin* (whence **sin-*, stem of the oblique cases), D **ni*/**n*/**ni* 'thou' (generalization of the genitive form as a common stem for the declension paradigm). The construction **ʔi ma* 'thee' (with the accusative marker **ma*) has been

9. *ma, postpositional marker of a definite direct object (accusative) > IE *-m accusative / U *-m(V), definite accusative / Tn' *-ba/*-bä, (after a nasal consonant) *ma/*-mä, definite accusative / D *-m, accusative / M *-ma-, marker of oblique cases (+ accusative) of personal and demonstrative pronouns: WrM na-ma-yi 'me', ci-ma-yi 'thee', i-ma-yi 'him' / Old Japanese -wo, accusative > New Japanese -o. Cp. (with further details and discussion) Illič-Svitič OS 2:48-51, Menges MP 21-36, Menges JA 11, 14, Collinder IUS 21, Collinder HUV 130.

10. *nu, postpositional marker of genitive > M *-n, (after monosyllabic stems, i.e. pronouns) *-nu (*minu, gen. of *bi 'I', *ēinu, gen. of *ēi 'thou', *manu, gen. of *ba, 'we' excl.) / pT *-ŋ, genitive / Tn *-ŋi (< *-n-ki), marker of possessive forms) / U *-n, genitive / D *-i(n), genitive / Old Japanese (-)no, postpositional genitive-marker > New Japanese -no / on traces of genitive -n in Korean see Ramstedt EASF 27 / IE *-n-, marker of oblique cases in heteroclitic nouns. For further details and discussion see Illič-Svitič OS 2:78-81 and Menges MP 9-20.

§3. In order to understand the original pN system of pronouns, we must take into account the rules of pN syntax. These rules, which can be deduced from the syntax of the daughter-languages and even more from the order of morphemes in grammatical forms, may be formulated as follows:

A. Words are classified into three groups (which differ in their syntactic behaviour):

- a) Full Words (in the sense of the Chinese traditional grammar, i.e. semantic counterparts of nouns, adjectives, adverbs and verbs of modern languages),
- b) Pronouns,
- c) Grammatical Words (e.g. case-markers).

B. Pronouns (if stressed?) can behave syntactically according to the rules of Full Words as well.

C. The predicate is the last Full Word of the sentence.

D. Any object precedes its verb (i.e. its Full Word with verbal meaning).

E. Any attribute (expressed by a Full Word) precedes its regens.

F. A pronoun (personal or demonstrative) functioning as attribute follows its regens. In this case a personal pronoun has possessive meaning.

G. A pronoun functioning as subject follows its predicate.

H. Case-markers follow the corresponding Full Word. Some

of them (genitive-marker *nu, accusative-marker *ma) follow immediately after its Full Word, while others (such as locative postpositions) can be used in a construction Full Word + *nu + postposition. This accounts for *-n- preceding the case-ending in the oblique cases of the IE heteroclitica, for the increment *-in-/-n- preceding the case endings of oblique cases in D, for some FU case forms (locative *-na < *nu Ha), as well as for the *-n-increment in the personal pronominal stems in the oblique cases (+ all cases) in U, T, Tn and D (see §1 [17,21,30,40]).

A logical corollary of the rules C - E is that the subject (if it is a Full Word) occupied the remaining place: somewhere in the initial part of the sentence.

These rules have been preserved almost entirely (either as syntactic rules of word-order or as morpheme-order in grammatical forms) in Uralic, Turkic, Mongolian, Tungusian, Gilyak, Korean, Japanese, Dravidian, Early Indo-European, Cushitic, and have determined the order of morphemes within words in the rest of the Nostratic languages. See Dolgopolsky OR 33-4. I hope to discuss the whole problem in a special paper³⁰.

§4. In order to explain the syntactic and morphologic distribution of the reflexes of pN pronouns in the daughter-languages (exposed in §1) we have to clarify: (a) the original system of pronouns and their syntactic features, and (b) the subsequent changes of this system which led to the systems of daughter-languages.

4.1 In our view, the original pN syntactic distribution of the pronouns in question may be reconstructed as in Table B:

Table B

	Sg.1	Sg.2
A. Syntactically unmarked pronouns (Nennform) used (a) as postpredicative subject, (b) as a Full Word functioning as subject, (c) as a Full Word with case postpositions (syntactic function being determined by the postposition)	*mi	*t'ū
B. Object pronouns		*KV
C. Postnominal pronouns (possessive)	*mi	*KV
D. Preverbal agentive pronouns	and/or *HoyV *HoyV	*t'ū (HV), *Hi (?)
E. Non-pronominal word liable to replace the independent pronoun	*HVKE	
F. Nomen regens following an appositional Nomen	*HVKE	*t'ū

'I' (postnominal apposition → postnominal subject).²⁶ There is a rather clear-cut functional difference between *HVKE and *mi 'I': whereas *mi is syntactically unmarked (and therefore can be used in quite different syntactic functions), *HVKE functions almost exclusively as an emphatic (independent) pronoun and a postnominal apposition (→ subject of a nominal predicate). Another striking peculiarity is that IE *eġ-H(om)/*eġo-H shows a combination of *eġ- (< *HVKE) with a pronoun of Sg.1 *-H or *-H^w (see §2.2). Both facts suggest that *HVKE is not a genuine personal pronoun, but a nominal substitute for the pronoun *mi. Like similar substitutes in other languages (Polish *pan* 'thou' ← 'lord, master', Spanish *Usted* 'thou' ← *Vuestra merced* 'your mercy', Yurak Samoyed *pīḥa-r* 'thou' ← 'thyself' ← 'thy body', Japanese *watakūshi* 'I' ← 'self', Bedaue *bar-āk* 'thou' ← Sg.2 possessive form of *bar-*, noun of unknown meaning), *HVKE is used mainly as an independent pronoun and does not penetrate the paradigms of verbal morphology. Like Yurak *pīḥa-*, Bedaue *bar-* and Middle Spanish *merced*, pN *HVKE can be combined with a genuine pronominal element, as is the case in IE *eġ-H(om)/*eġo-H. Therefore I cannot help agreeing with O.Szemerényi's treatment of IE *eġ- as a substitute for *mi (Szemerényi EVS 199).

The final vowel of this pN word is to be reconstructed as palatal (symbolized as *E, i.e. *e or *ä) on the evidence of the IE palatal *ġ (regular representation of pN *k before front vowels). The SH *-u in *-āku and *Pan-āku may be interpreted as the SH regular case-ending of the nominative case (> Sem. *-u, Highland East Cushitic *-u, Somali nominative-marker -u within the nominative form of the definitive article -k-u, as opposed to the non-nominative -ka; cp. Djakonoff SHL 57-60, Hetzron SCCS).

7. *nV 'we' exclusive > SH *n- 'we' exclusive > Chadic *nV id. (see Dolgopolsky EPC), Sem., Berber, Cushitic *n-, marker of Pl.1, Eg. n 'we' / K *n-, Pl.1 exclusive / IE *ne-/nō-, pronoun of Pl.1 (stem of oblique cases) / Gilyak (Amur dialect) *ñeŋ*, (ESakhalin dialect) *niŋ* 'we' excl. / probably, pD *nā-m 'we' inclusive (change of function). Plural pronouns are beyond the scope of the present paper. Nevertheless, I mention the pronoun *nV her, since it appears to have influenced the pronoun of Sg.1 in Gilyak and probably in Mongolian. Gilyak *ñi* 'I' may be explained as resulting from a proportional analogy:

Nostratic	pre-Gilyak	Gilyak
*mi sg.1 : *nV pl.1 excl. *t(ū) sg.2 : *t(ū) NV pl.2. (*nV is a plural marker)	*mi sg.1 : *niŋ pl.1 ex. *tñi sg.2 : *tñiŋ pl.2	ñi sg.1 : ñeŋ pl.1 excl. tñi sg.2 : tñeŋ pl.2

A similar process in the prehistory of Mongolian may be responsible for the stem *nama-* ~ *na-* in the oblique cases of the M pronoun *bī* 'I' (-*ma-* going back to the pN accusative marker *ma 'I', cf. §2.9). See above §1[26] and Illič-Svitič OS.1:7.

8. *ʔonV (or *ʔonV)²⁷ 'self, the same' > U *oNe or *oNa (*N = *n or *ŋ) > proto-Samoyed *ñn 'self'²⁸, used with personal pronominal suffixes to form reflexive pronouns: Sölqup (Tīm dialect) *on-āk* 'myself', *on-ānti* 'thyself', *on-ti* 'himself, herself', etc., Nganasan *ḡonəne* 'myself', *ḡonəntə* 'thyself', etc. (see Janhunen SW 18, Kuznecova-Xelinskij-Gruškina OSYa 290-3, Tereščenko NgYa 428) / Turkic: Old Uyghur *onā* 'precisely, exactly' (Clausen ED 170; TT V:32, Note B 80) / Mongolian: WrM *önü-ki*, Khalkha *önöx* 'the one in question', 'that very (thing or person)': WrM *önüki* *kereg* 'that very matter' / SH *Pan- : Eg. *ln*, subject emphaticizer, i.e. a particle replacing the sentence-initial nominal predicate and thus causing inversion of the normal word order: Nominal predicate + Nominal subject → *ln* + Nominal subject + Nominal predicate; SH *Pan-āku 'I' (emphasized) > Eg. *lnk*, pSem *Panāku, pBerber *enəkk^w; SH *Pan-ī 'I' (emphasized or independent "Nennform") > pSem. *Panī, pSCush. *āni, pCCush. *Pan, Somali *anī-ga*, etc. (see §1 [8]); SH *Pan-t(ī) 'thou' > Bilin *enti*, Somali *adī-ga*, pSCush. *āta 'thou', pSem. *Pan-t-a 'thou'm.', *Pan-t-i 'thou' f., Eg. *nt-k* 'thou' m., *nt-t* 'thou' f. The etymological identity of Eg. *ln* with the initial element *Pan- of the SH pronouns is suggested by the fact that in Old Egyptian the pronoun *lnk* 'I' (< *Pan-āku) is syntactically identical with *ln* + nominal subject: "An Stelle von jn + Substantiv treten bei pronominalem Subjekt ... die nichtenklitischen Personalendungen (jnk, ...)" (Edel AAG 423)²⁹. Eg. *ln* (and hence SH *Pan-) may be characterized as a nounemphasizing nomen (adjective?), something like Polish *własnie* (*Własnie tego potrzebujemy* 'That is just what we want') or Italian *proprio* (*L'hai fatto proprio tu?*). Just as *własnie* and *proprio*, SH *Pan- may go back to a word meaning 'one's own, self'. If so, SH *Pan-āku and *Pan-t(ī) have an etymological meaning reminiscent of French *moi-même* and *toi-même*.

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NOTE IN THE LIST OF REFERENCES

- 1 I saw one of these manuscripts in the Archives of the Academy of Sciences (Leningrad) and the other in the Saltikov-Šchedrin Public Library (Leningrad) in 1969. I have no access to these manuscripts now (except for what I managed to copy then), and I do not remember which of the two manuscripts belongs to which institution.

ABBREVIATIONS IN THE LIST OF REFERENCES

- AKS = Altkleinasiatische Sprachen. Mit Beiträgen von J. Friedrich, E.Reiner, A.Kammenhuber, G.Neumann, A.Heubeck. (=Handbuch der Orientalistik. 1.Abt.: *Der Nahe und der Mittlere Osten*. 2.Bd.: *Keilschriftforschung und alte Geschichte Vorderasiens*. 1.u.2. Abschnitt: *Geschichte der Forschung, Sprache und Literatur*. Lief.2: *Altkleinasiatische Sprachen*). Leiden-Köln, 1969.
- DYaMA = Drevnie yaziki Maloy Azii. Sbornik statey. Pod.red. I.M.D'yakonova i Vyač.Vs.Ivanova. Moskva, 1980.
- HOM = Mongolistik. Mit Beiträgen v. N.Poppe, U.Posch, G.Doerfer u.a. (= Handbuch der Orientalistik. 1. Abt.: *Der Nahe und der Mittlere Osten*. 5.Bd.: *Altaistik*. 2.Abschnitt: *Mongolistik*. Leiden-Köln, 1964).
- KSI = Institut slavyanovedeniya i balkanistiki Akademii nauk SSSR. Konferenciya po sravnitel'no-istoričeskoy grammatike indoevropeyskix yazikov. Predvaritel'nye materialy. Moskva, 1972.
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- YaNSSSR III = *Yaziki narodov SSSR. III: Finno-ugorskie i samodiyskie yaziki*. Moskva, 1966.
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- YaPNS III = *Yaziki i pis'mennost' narodov Severa*. Pod red. Ya. A. Al'kora. Čast' III. Moskva-Leningrad, 1934.

rectum (→ postnominal apposition +
subject of a nominal predicate)

Examples of languages preserving the ancient syntactical use of pronouns or its traces:

- Aa: IE *-m(i), *-s(i) and U *-m(V) and *-t(V) as verbal endings of Sg.1 and Sg.2 subiecti, pM *bi and *ti, pTn *bi and *si as postpredicative subject pronouns.
- Ab: U *mE and *tE, pT *bi, *si, M *bi, *ti, pTn *bi, *si, K *mi, *si as nominative of the pronouns 'I' and 'thou'.
- Ac: IE genitive *mene, M genitive *mīnu, *tīnu, Tn genitive *mini, *sini, M accusative *tīma(yī) > cimayi 'thee', IE accusative: OIndian māṁ, tvāṁ, Avestan mam, Svam, Slavonic mę, tę.
- B: K *m- 'me' (verbal prefix Sg.1 obiecti), *g- 'thee' (prefix Sg.2 obiecti), SH *ku 'thee' (and *k-a 'thee' m., *k-i, *k-vm 'thee'f.) and probably IE *mē 'me' (> Greek με, OIndian mā, Hittite enclitic -mu).
- C: pN postnominal *HoyV > SH postnominal *Vya 'my', E postnominal u- (+ class marker) 'my'; pN postnominal *mi > Hittite -mi-, U *-m(e), pT *-m 'my'; pN *KV 'thy' > SH postnominal *ku (~ *k-a, *k-i, etc.) 'thy', pT *-y/g 'thy'; pN postnominal *t'ü > Hittite -ti-, U *-t(e) and probably Tn postnominal *si 'thy'.
- D: SH *q- and *t- (verbal prefixes of Sg.1 and Sg.2 subiecti), K *hw- and *h- (verbal prefixes of Sg.1 and Sg.2 agentis), Pre-IE *H- and *tH- (verbal prefixes of Sg.1 and Sg.2 with presumably agentive meaning) > IE *-H- and *-tH- (verbal presuffixes of Sg.1 and Sg.2 subiecti).
- E: IE *eġ- in *eġ-H(om) ~ *eġ-H 'I'
- F: SH *-āku and *-ti in *ʔan-āku and *ʔan-ti (originally appositional *ʔan- 'self' + nomen regens *ʔāku 'I' or *ti 'thou', cp. Russian я сам, ты сам with the personal pronouns as nomina regentia and сам as their apposition) and as person markers in nominal predicates (→ Akkadian stative, WS perfect) going back to a postnominal appositional pronoun (like in Elamite and Dravidian "pronominalized nouns") and finally to a nomen regens following its nomen rectum; E -k and -t (postnominal apposition: 'king I', 'dead thou').

In Table B in ^{the} function "Postnominal pronouns (possessive)" we find two pronouns ^{of Sg.1} *mi and *HoyV. Three alternative interpretations of this fact are possible:

- (a) both pronouns were used in this function,
- (b) *HoyV is the original pronoun for this function, while the use of *mi (as in IE, U and pT) is more recent and is due to an extension of the syntactically unmarked

pronoun.

- (c) *mi is the original pronoun, while the use of *HoyV developed later in the prehistory of SH and E due to the fact that in these languages *HoyV had become the syntactically unmarked pronoun of Sg.1.

4.2. The historical changes leading from the original system to the systems of the daughter-languages may be reconstructed as follows:

4.2.1. The pronoun *t'ü underwent delabialization of its vowel (*t'ü > *t'i) and assimilatory palatalization (→ assibilation) of its consonant (*t'i > *si, *t'ü > *sü), hence Anatolian *ti 'thou', *-ti 'thy', IE *-si/*-s (verbal ending of Sg.2), K *si 'thou', U *ti(nV) (side by side with *tun-), pT *si 'thou' (and the stem of the oblique cases *sün), M *ti > ši, Tn *si. The variant *sü (with the assibilation, but without delabialization) is preserved in the Tn plural form *süü 'ye' < *t'ü + *Ha, pN pron. coll. (see Benzing TS 107-9). Both processes are probably due to a reduction of phonetic features, typical of grammatical morphemes and not accounted for by regular sound laws (like -ša > -sa in the Russian reflexive ending -ся). These changes probably belong to a rather early period in the history of the Nostratic languages (period of common interdialectal developments?), since their results are observed in many branches of N.

4.2.2. Changes from pN to IE:

- A. The syntactically unmarked pronoun of Sg.2 *t'ü extended its use to all syntactic functions (incl. object and postnominal possessive pronoun).
- B. Full Words as predicates + Postpredicative subject pronouns *mi and *si → Active forms of verbum finitum (Present with the endings *-mi for Sg.1 and *-si for Sg.2, past tenses with the endings *-m and *-s).
- C. Agentive pronouns (Sg.1 *HoyV, Sg.2 *t'V-HV) + Predicates → Pre-IE verbs (of state?) with prefix-conjugation (resembling those of K and SH). Such verbs were later lost, except for several auxiliary verbs which took part in periphrastic constructions «Nominal form of verbs (verbal noun, adjective, etc.) + Auxiliary Verb» → IE verb forms of Middle voice (medium), LIE forms of Perfect (originally verbal forms of state?) and Hittite forms of xi-conjugation, all of them with *-H- and *-tH- as markers of Sg.1 and Sg.2. Probably the LIE ending *-H^W (Present tense of the thematic verbs: *-e-H^W > *-ō > -ō in Latin and Greek) belongs here as well.
- D. Postnominal possessives *mi and *t'i (< *t'ü) → posses-

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- E. Itkonen's notation (Itkonen OLV). It corresponds to Korhonen's o. Kola Lapp e of the second syllable may go back to pLapp * ϵ < FU *u (Korhonen JLK 102-3). The variant *mũ appears to result from a reduction of *munu.
- 12 B. Collinder is right in saying: "The personal endings of the first and second persons are historically speaking pronominal stems ... It cannot be inferred with apodeictic certainty that the combination of verb stem (or base) and personal ending existed in Proto-Uralic - it may have taken place separately in different branches of Uralic" (Collinder CG 308). To this I may add that there may have been two series of subject pronouns (+ verbal suffixes of person/number) used in different periphrastic constructions (+tenses, types of conjugation), one of the series probably being etymologically identical to the simple (unenlarged) stems *mE, *tE, and the other going back to enlarged stems *mVnV, *tVnV (see [17]). Probably this latter case is responsible for the ending -n of Sg.2 in Ziryene, Votyak, Ostyak and Vogul (< *nVnV, assimilation from *tVnV, see [17]).
 - 13 A. Künnap reconstructs the pSam verbal personal suffix(es) of Sg.2 as *- δ V ~ *- δ , his * δ corresponding more or less to *-t- of J. Janhunen's and P. Sammallahti's reconstruction of pSam.
 - 14 In pT there was no phonemic opposition of *m and *b in the word-initial position: in the absence of other nasal consonants in the same or next syllable, the original *m- (recognized as such on the evidence of external etymological comparison) became *b-, while in the presence of another nasal consonant the initial *m- was preserved (and most probably the etymological *b- became *m- as well). Hence there was no phonemic difference between two possible notations of the pT stem as *mān or *bān. I prefer the notation *mān for diachronic reasons: firstly, this *m/b- goes back to *m-, and secondly, it has remained *m- in most Turkic languages (but not in Anatolian Turkish). Cp. Clauson ED 291.
 - 15 According to Clauson ED 346, 831 the vowel is ä, according to Kononov GYaTRP 164-5 it is e.
 - 16 But Clauson^{ED} 346, 831 reads the Old Turkic forms (spelt in Toñuquq 10 as bini and sini) as benī and senī. DTS mentions both readings as possible.
 - 17 Preterit (=Perfect) with - δ i/- δ ī-, δ i/- δ ī- is ^aprimary (=genuine finite) verbal form, according to Tekin GOT 187-9. Other forms (with -m Sg.1, - η ~ -y/g Sg.2) appear to go back to a construction Verbal noun + Possessive suffix (Tekin GOT 190-1).
 - 18 In Sg.2 similar forms are not found. Instead, forms with -n are used: pīr^a-n 'you will go', pēle-n 'you will say' (with -n < *- η , regular verbal suffix of Sg.2). These forms are obviously due to analogy (generalization of the ending of primary forms).
 - 19 Unlike postnominal *mī 'my' and *sī 'thy', these genitive forms *mīnī and *sīnī occupy the regular position of the nominal attribute, i.e. they precede the nomen regens.
 - 20 The Southern and Eastern (=Kamchatka-River) dialects of Kamchadal are now extinct. The only materials available are very short wordlists recorded by travellers in the 18th century (Stepan Krašeninnikov, M. Robek, K. Merk, Baxmet'ev, as well as the anonymous correspondents of P.S. Pallas, who sent him short dialect glossaries for his *Linguarum totius orbis vocabularia comparativa*) and more extensive vocabularies of both dialects by the Polish physician Prof. B. Dybowski who recorded Kamchadal words in his exile in Kamchatka (second half of the 19th century). See Krašeninnikov OZK, Pallas LTO, Radliński SNLK II-III, Sjögren K, Sjögren SK. The words recorded by S. Krašeninnikov and B. Dybowski are in Cyrillic characters, the others are in Roman characters (reproduced here in bold type).
 - 21 To understand the phonetic value of the unprofessional records of SKamch. and EKamch. in Roman characters, it should be kept in mind that those who recorded the words were either speakers of German or Russian-speakers with German-orientated habits of using Latin script. From their records of WKamch., Koryak and other languages known today we learn that they usually rendered e by y, ü, e, ž by sch or sh. In Kamchadal there is no phonemic opposition between hiss and hush sibilants (both in WKamch. and in the extinct SKamch. and EKamch.) and the phonetic realization of the voiced sibilant (tentatively reconstructed as *ž) could make an acoustic impression either of ž (x of Krašeninnikov's Russian transcription, sch ~ sh of the German travellers) or of z (z of Dybowski, who was a Polish-speaker). On modern WKamch. z (half-hush) see Volodin IYa 28-9.
 - 22 The form yer is mentioned in Bogoraz Ch 677, 720. In Chukchee folklore texts it occurs when the pronoun is enclitic: *iām nēleivūtku-y-yer* 'Why art thou walking about?' (Bogoraz Ch 893).
 - 23 One may suggest a morpheme-to-morpheme translation 'seen' + 'by me' + 'is' (*woid-'seen', *-H- 'by me', *-e 'is'), if we choose to translate the auxiliary verb, preserved in the ending *-e, as 'is'.
 - 24 Cp. pN *gāti 'hand' > IE *ghes- id., D *kac- id. (see Illič-Svitič OS 1:227).
 - 25 On existing etymological hypotheses see §1 [41].
 - 26 It is worth considering the possibility of explaining Brahui ka-n- (Sg.1 pronoun, oblique cases) as going back to pN *HVKK (Brahui -n- is from a case-marker?).
 - 27 The sign ḡ stands for the cerebral (coronal) nasal consonant (ḡ of the Finno-Ugrian transcription, ḡ of the Indologists, Collinder's and Illič-Svitič's ḡ). The difference between pN *n and *ḡ has been preserved only in Ob-Ugrian (some Ostyak dialects) and Dravidian. In the root in question, for lack of Ob-Ugrian and Dravidian reflexes, the two phonemes cannot be distinguished.
 - 28 pSam. *ān presupposes pU *oNe (= pU *onī in J. Janhunen's notation) or pU *oNa (= Janhunen's *onā). See Janhunen UKS 226, 235-6, 242.
 - 29 Edel's j corresponds to the ḡ in the modern Egyptological (=Erman-Grapow's) transliteration.
 - 30 In the same paper I hope to explain my conception of pN as an analytic root-isolating language. This is a working hypothesis based on certain facts (such as mobility of grammatical exponents etc.). Of course, this hypothesis has nothing to do with glottogenic theories about "rude and simple beginnings" of human speech (to quote W.D. Whitney), since Nostratic obviously has a very long prehistory and, like Old Chinese (a classical example of a root-isolating language) might well have developed from an earlier synthetic language as well. Cf. Jes-